

S1 1 PN='JP 3041087'  
? t s l / 9 / 1

1/9/1

DIALOG(R)File 351:Derwent WPI  
(c) 2004 Thomson Derwent. All rts. reserv.

008397359

WPI Acc No: 1990-284360/199038

XRAM Acc No: C90-122755

**Purifying single-stranded targetted nucleic acid - using non-porous  
non-magnetic particle with complementary nucleic acid attached**

Patent Assignee: CETUS CORP (CETU ); EASTMAN KODAK CO (EAST ); OAKES F T  
(OAKE-I); CETUS ONCOLOGY CORP (CETU )

Inventor: BURDICK B A; CHANG C; FYLES J L; OAKES F T

Number of Countries: 015 Number of Patents: 007

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 388171	A	19900919	EP 90302704	A	19900314	199038 B
CA 2011818	A	19900917			199049	
JP 3041087	A	19910221	JP 9064459	A	19900316	199114
KR 9207664	B1	19920914	KR 903590	A	19900317	199409
EP 388171	B1	19950531	EP 90302704	A	19900314	199526
DE 69019770	E	19950706	DE 619770	A	19900314	199532
			EP 90302704	A	19900314	
JP 2609738	B2	19970514	JP 9064459	A	19900316	199724

Priority Applications (No Type Date): US 90475068 A 19900205; US 89325311 A  
19890317

Cited Patents: 1.Jnl.Ref; A3...9123; EP 184056; EP 258017; EP 265244; EP  
296557; EP 301899; EP 317074; NoSR.Pub; EP 200113; GB 2202328

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 388171 A

Designated States (Regional): AT BE CH DE FR GB IT LI LU NL SE

EP 388171 B1 E 11 C12Q-001/68

Designated States (Regional): AT BE CH DE DK FR GB IT LI LU NL SE

DE 69019770 E C12Q-001/68 Based on patent EP 388171

JP 2609738 B2 8 C12N-015/09 Previous Publ. patent JP 3041087

KR 9207664 B1 C12N-015/00

Abstract (Basic): EP 388171 A

Method for purifying at least one single-stranded, targeted nucleic acid comprises (a) contacting the specimen with a purification reagent comprising a particle having directly attached a nucleic acid fragment complementary to a nucleic acid sequence of the targeted nucleic acid under conditions suitable to form an insoluble hybrid; and (b) sepg. the hybrid from the remainder of the specimen. The purification reagent comprises a nonporous, nonmagnetic particle.

USE/ADVANTAGE - The nucleic acid targets can be rapidly and simply purified. The purified nucleic acids may then be amplified by e.g. polymerase chain reaction of e.g. HIV-I DNA, human leukocyte antigen (HLA) DNA or human beta-globin DNA, for diagnosis. The purified nucleic acids could also be used to improve the efficiency of cloning DNA or mRNA or for obtaining large amts. of the desired acid from a mixt. of nucleic acids resulting from chemical synthesis. (10pp Dwg.No.0/0)d c

Abstract (Equivalent): EP 388171 B

A method for amplifying at least one single-stranded, targetted nucleic acid in a biological specimen suspected of containing a mixture of nucleic acids using a polymerase chain reaction comprising: A. contacting the specimen with a purification reagent comprising a nonporous, nonmagnetic particle having directly attached thereto a nucleic acid fragment complementary to a nucleic acid sequence of the targetted nucleic acid, under conditions suitable to form an insoluble hybrid, B. separating the hybrid from the remainder of the specimen, and C. amplifying the nucleic acid sequence of interest using a polymerase chain reaction with or without denaturation from the insoluble hybrid.

Dwg.0/0

Title Terms: PURIFICATION; SINGLE; STRAND; TARGET; NUCLEIC; ACID; NON; POROUS; NON; MAGNETIC; PARTICLE; COMPLEMENTARY; NUCLEIC; ACID; ATTACH

Derwent Class: B04; D16

International Patent Class (Main): C12N-015/00; C12N-015/09; C12Q-001/68

International Patent Class (Additional): C12Q-001/68

File Segment: CPI

Manual Codes (CPI/A-N): B04-B04A1; B04-B04D5; B11-C08E; B12-K04A; D05-H06; D05-H09; D05-H12

Chemical Fragment Codes (M1):

\*01\* M423 M720 M903 N135 N164 N512 P831 Q233 V753

?